

**Amendments to the Claims:**

This listing of claims will replace all prior versions of the claims in this application:

**Listing of Claims:**

**Claim 1 (currently amended):** A rear projection screen for use with a projection lens which has an exit pupil (the "projection lens' exit pupil"), said screen having a light entering side and a light exiting side and comprising in order from said light entering side to said light exiting side:

- (a) a Fresnel structure;
- (b) a lenslet array; and
- (c) an opaque layer comprising a plurality of holes, said holes being at locations which correspond to the images of the projection lens' exit pupil formed by the combination of the Fresnel structure and the lenslet array,

wherein:

- (i) the screen is for use with a pixelized panel and the lenslet array comprises elements whose size is at least several times smaller than the magnified image of a pixel produced at the array by the projection lens; or
- (ii) the screen is for use with a cathode ray tube and the lenslet array comprises elements whose size is at least several times smaller than the magnified image of a dot spot of the cathode ray tube produced at the array by the projection lens.

**Claim 2 (original):** The screen of Claim 1 wherein the lenslet array comprises elements which have a square aperture.

**Claim 3 (original):** The screen of Claim 2 wherein, in viewer space, the screen has a half field of view  $\alpha$  given by:

$$\alpha = \tan^{-1}(0.5 \bullet CA/f)$$

where CA and f are, respectively, the clear aperture and the focal length of the elements.

**Claim 4 (original):** The screen of Claim 1 wherein the lenslet array comprises elements which have a rectangular aperture.

**Claim 5 (original):** The screen of Claim 4 wherein, in viewer space, the screen has a vertical half field of view  $\alpha_v$  given by:

$$\alpha_v = \tan^{-1}(0.5 \bullet CA_v/f)$$

and a horizontal half field of view  $\alpha_H$  given by:

$$\alpha_H = \tan^{-1}(0.5 \bullet CA_H/f)$$

where  $CA_v$ ,  $CA_H$ , and f are, respectively, the vertical clear aperture, the horizontal clear aperture, and the focal length of the elements.

**Claim 6 (original):** The screen of Claim 1 wherein the lenslet array comprises anamorphic elements.

**Claim 7 (original):** The screen of Claim 6 wherein, in viewer space, the screen has a vertical half field of view  $\alpha_v$  given by:

$$\alpha_v = \tan^{-1}(0.5 \bullet CA/f_v)$$

and a horizontal half field of view  $\alpha_H$  given by:

$$\alpha_H = \tan^{-1}(0.5 \bullet CA/f_H)$$

where CA,  $f_v$ , and  $f_H$  are, respectively, the clear aperture, the vertical focal length, and the horizontal focal length of the elements.

**Claim 8 (original):** The screen of Claim 1 further comprising a protective layer on the light exiting side of the opaque layer.

**Claim 9 (original):** The screen of Claim 8 wherein the Fresnel structure, the lenslet array, the opaque layer, and the protective layer are arranged as subassemblies.

**Claim 10 (original):** The screen of Claim 9 wherein the Fresnel structure and the lenslet array are arranged in one subassembly and the opaque layer and the protective layer are arranged in another subassembly.

**Claims 11-12 (canceled)**

**Claim 13 (currently amended):** A rear screen projection system comprising a projection lens having an exit pupil (the "projection lens' exit pupil") and a rear projection screen which has a light entering side and a light exiting side and comprises in order from said light entering side to said light exiting side:

- (a) a Fresnel structure;
- (b) a lenslet array; and
- (c) an opaque layer comprising a plurality of holes, said holes being at locations

which correspond to the images of the projection lens' exit pupil formed by the combination of the Fresnel structure and the lenslet array;

wherein the Fresnel structure has a front focal distance and the distance from the projection lens' exit pupil ~~of the projection lens~~ to the screen is equal to said front focal distance,

wherein:

- (i) the screen is for use with a pixelized panel and the lenslet array comprises elements whose size is at least several times smaller than the magnified image of a pixel produced at the array by the projection lens; or
- (ii) the screen is for use with a cathode ray tube and the lenslet array comprises elements whose size is at least several times smaller than the magnified image of a dot spot of the cathode ray tube produced at the array by the projection lens.

**Claim 14 (canceled)**

**Claim 15 (previously presented):** The rear screen projection system of Claim 13 wherein the lenslet array comprises elements which have a square aperture.

**Claim 16 (previously presented):** The rear screen projection system of Claim 15 wherein, in viewer space, the screen has a half field of view  $\alpha$  given by:

$$\alpha = \tan^{-1}(0.5 \bullet CA/f)$$

where CA and f are, respectively, the clear aperture and the focal length of the elements.

**Claim 17 (previously presented):** The rear screen projection system of Claim 13 wherein the lenslet array comprises elements which have a rectangular aperture.

**Claim 18 (previously presented):** The rear screen projection system of Claim 17 wherein, in viewer space, the screen has a vertical half field of view  $\alpha_v$  given by:

$$\alpha_v = \tan^{-1}(0.5 \bullet CA_v/f)$$

and a horizontal half field of view  $\alpha_H$  given by:

$$\alpha_H = \tan^{-1}(0.5 \bullet CA_H/f)$$

where  $CA_v$ ,  $CA_H$ , and f are, respectively, the vertical clear aperture, the horizontal clear aperture, and the focal length of the elements.

**Claim 19 (previously presented):** The rear screen projection system of Claim 13 wherein the lenslet array comprises anamorphic elements.

**Claim 20 (previously presented):** The rear screen projection system of Claim 19 wherein, in viewer space, the screen has a vertical half field of view  $\alpha_v$  given by:

$$\alpha_v = \tan^{-1}(0.5 \bullet CA/f_v)$$

and a horizontal half field of view  $\alpha_H$  given by:

$$\alpha_H = \tan^{-1}(0.5 \bullet CA/f_H)$$

where CA,  $f_v$ , and  $f_H$  are, respectively, the clear aperture, the vertical focal length, and the horizontal focal length of the elements.